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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/537,738 03/29/00 RANGANATHAN N II-1

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EXAMINER

YOCKEY, D

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 02/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/537,738

Applicant(s)

RANGANATHAN ET AL.

Examiner

David Yockey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Specification

The spacing of the lines of the newly provided abstract is such as to make reading and entry of amendments difficult. A new abstract with lines double spaced on good quality paper are required. See MPEP 608 and 608.01.

Claim Objections

Claims 17-20 are objected to because of the following informalities: "grove" on line 10 of claim 17 should be "groove." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niedermeyer et al. (US 5,343,226) in view of Ramacier, Jr. et al. (US 5,316,041) and Preszler (US 5,293,913).

Niedermeyer et al. teaches the claimed invention except the means for supplying ink to the reservoir independently of actuation by the reservoir.

Ramacier, Jr. et al. discloses a duplex connector consisting of a quick connect coupling valve assembly which facilitates fluid connection and disconnection without leakage. Note in particular Fig. 2 and, with respect to the fixed post limitation of claim 9, Figs. 23-24C.

Preszler teaches a means by which elements of a duplex coupler may be connected to an ink bottle and ink reservoir, i.e. by threaded connections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the Ramacier, Jr. et al. duplex connector for the valve structure in the Niedermeyer et al. apparatus, where connections are provided as taught by Preszler, for the purpose of providing a valve assembly which facilitates quick fluid connection and disconnection without leakage.

The steps of the claimed method are deemed to be clearly obvious in view of the functions of the structure in the combination discussed above.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niedermeyer et al. (US 5,343,226) in view of Ramacier, Jr. et al. (US 5,316,041), Preszler (US 5,293,913), and Ito (US 6,053,603).

The combination of Niedermeyer et al. in view of Ramacier, Jr. et al. and Preszler, as discussed above with regard to claims 1-12 and 17-20, applies also to claims 13-16. This combination suggests the claimed invention except the insertion of the other component *into* a bottle; the combination suggests that the other component be attached *onto* a bottle.

Ito discloses providing a pipe 40a which extends into a bottle as part of a connector which connects the bottle to an ink reservoir (see in particular Fig. 4(d)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a pipe as taught by Ito extending from the other component for the purpose of facilitating connection of the other component to a bottle having a pierceable obstruction, including such well known obstructions as a foil or a rubber stopper.

Response to Arguments

Applicant's arguments filed 20 November 2000 have been fully considered but they are not fully persuasive.

Applicant's argument with respect to the drawing objection have been considered but are moot in view of cancellation of the objectionable matter from the claims.

Applicant's argument with respect to the claim objection is not persuasive. Contrary to Applicants' assertion, claim 17 has not been amended.

Applicant's argument with respect to the rejection of claims 4 and 7-12 under 35 USC 112, first paragraph have been considered but are moot in view of cancellation of the matter in question from the claims.

Upon reconsideration of the disclosure with respect to insertion of the other component of the two-component coupler into the ink bottle, it is noted that Figs. 3 and 5 suggest extension of an unlabelled tubular member from the other component into the bottle. Accordingly, the rejection of claims 13-16 under 35 USC 112, first paragraph is withdrawn.

Applicant argues that, in addition to requiring reservoir actuation, Niedermeyer fails to disclose the duplex coupler. It is agreed that Niedermeyer does not disclose the duplex coupler, and it is respectfully submitted that the Examiner indicated as much in the rejection. Specifically, the duplex coupler is part of the means for supplying ink to the reservoir independently of actuation by the reservoir; thus, the lack of the means for supplying ink to the reservoir independently of actuation by the reservoir implies lack of the duplex coupler.

Applicant assert that valve actuation by the reservoir is the essence of the Niedermeyer invention, citing recitation in all four claims of a "valve actuating means" in the supply base for operating a valve member mounted in the opening of the ink container. In response, it is noted that in the combination, a "valve actuating means," i.e. one component of the Ramacier, Jr. et al. assembly, is provided as part of the supply base, albeit removably attached thereto.

Applicant argues that the combination of Ramacier, Jr. with Niedermeyer is based upon hindsight reasoning because Ramacier, Jr. emphasizes that particular matters are desirable and critical in the medical or fluid dispensing industries and because Niedermeyer does not suggest that these matters are critical or desirable in the apparatus therein. This argument is not persuasive. A reference is to be considered not only for what it expressly states, but for what it would reasonably have suggested to one of ordinary skill in the art. *In re DeLisle*, 160 USPQ 806 (CCPA 1969). Aside from the specific emphasis noted by Applicants, Ramacier, Jr. reasonably suggests to one of ordinary skill in the art that the Ramacier, Jr. assembly provides a

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fluid passageway through a quick connection and without leakage. The advantages of saving time making a fluidic connection and of avoiding mess from fluid leakage are implicit in the provision of a quick connection without leakage. Additionally, it is noted that the ink bottle of Niedermeyer is a fluid dispensing assembly, which dispenses fluid from the bottle into the reservoir, and thus falls within the fluid dispensing industry.

Applicant argues that there is nothing in Preszler to suggest adapting Ramacier, Jr. to the Niedermeyer system. This argument is not deemed to be germane to the issue since Preszler is not relied upon in the rejection for such a suggestion. Adaptation of Ramacier, Jr. to the Niedermeyer system is suggested by the combination of those references as discussed above, with Preszler being cited for the suggestion of particular means by which a duplex coupler may be connected to a bottle and ink reservoir, i.e. by threaded connection.

Applicant alleges that the combination of references would not have been obvious because the teachings of the references are completely contrary. The Examiner respectfully disagrees for the reasons discussed above.

Applicant argues that, where connections are provided as taught by Preszler, they are for the purpose of preventing male components from being mounted on incorrect female components. The Examiner respectfully disagrees. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of

ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Elements 22 and 26 constitute a duplex coupler. Threads 40 connect one component of the duplex coupler to an ink bottle 16. Threads 49 connect another component of the duplex coupler to an ink tank 14. Accordingly, Preszler provides a suggestion as to means by which elements of a duplex coupler may be connected to an ink bottle and ink reservoir, i.e. by threaded connections.

In response to applicant's argument that the examiner's conclusion of obviousness with respect to claims 1-12 is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As discussed above in response to Applicants specific arguments, the rejection takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, as evidenced by the teachings of the cited references.

With respect to the limitations in claims 17-20 which Applicant argues are neither taught nor disclosed by the references alone or in combination, it is noted that Niedermeyer discloses a container 60 and cap 88, Ramacier, Jr. discloses the circumferential groove (outer surface 112; see in particular Figs. 13A, 13B, and 17), the taper beyond the groove (cylindrical inclined wall 83; See Figs. 13A, 13B), and the collar

(clip member 78; see in particular Figs. 2 and 10). In the combination, one component of the Ramacier, Jr. structure is connected by threads as a cap, as well as the other component being connected by threads to the reservoir, to provide the advantages discussed in the rejection above. The remaining limitations in claims 17-20 noted by Applicant are merely structural elements of the corresponding portion of the Ramacier et al. duplex coupler that is identical to that of Applicants' invention.

Applicant's general allegation, unsupported by specific argument, that there is no applicable teaching in Ito is not persuasive. Additionally, Applicant's apparent admission as to the obviousness of the combination of Ito with the other references in the sentence bridging pages 17 and 18 of Applicant's response is noted but disregarded, being understood to be an inadvertent word processing error.

In response to Applicant's argument that the steps of the method claims cannot be deemed to be clearly obvious in view of the disparity in the functions of the structure in the "improper combination," it is respectfully submitted that the combination is proper for the reasons discussed above, that the combination of structure is identical to that claimed, and that the method steps are clearly suggested by the combination of the structure and the functions thereof as suggested by the references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Yockey whose telephone number is (703) 308-3084. The examiner can normally be reached on all weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

DY
February 24, 2001


DAVID F. YOCKEY
PRIMARY EXAMINER